

FIG. 1

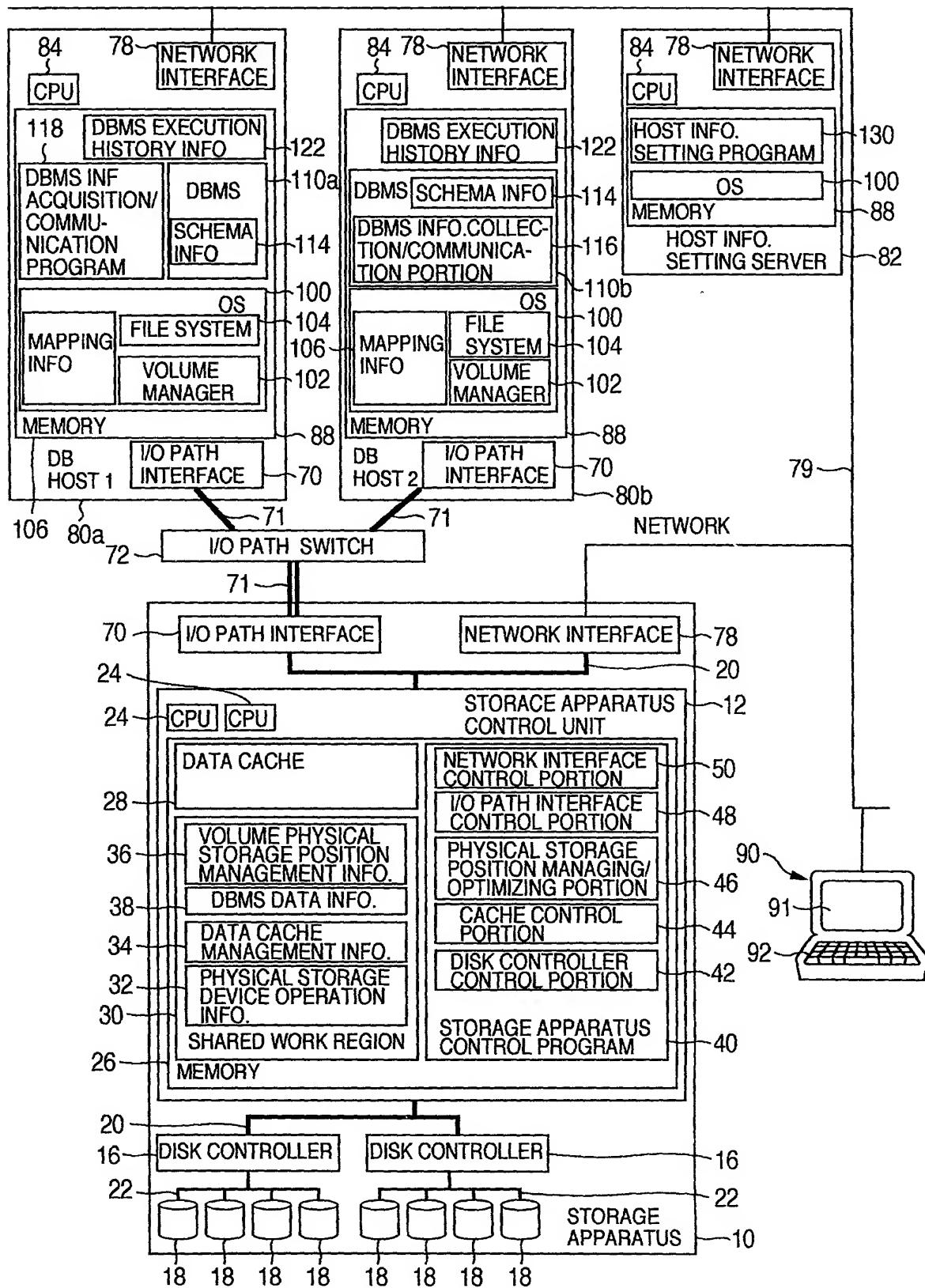


FIG.2

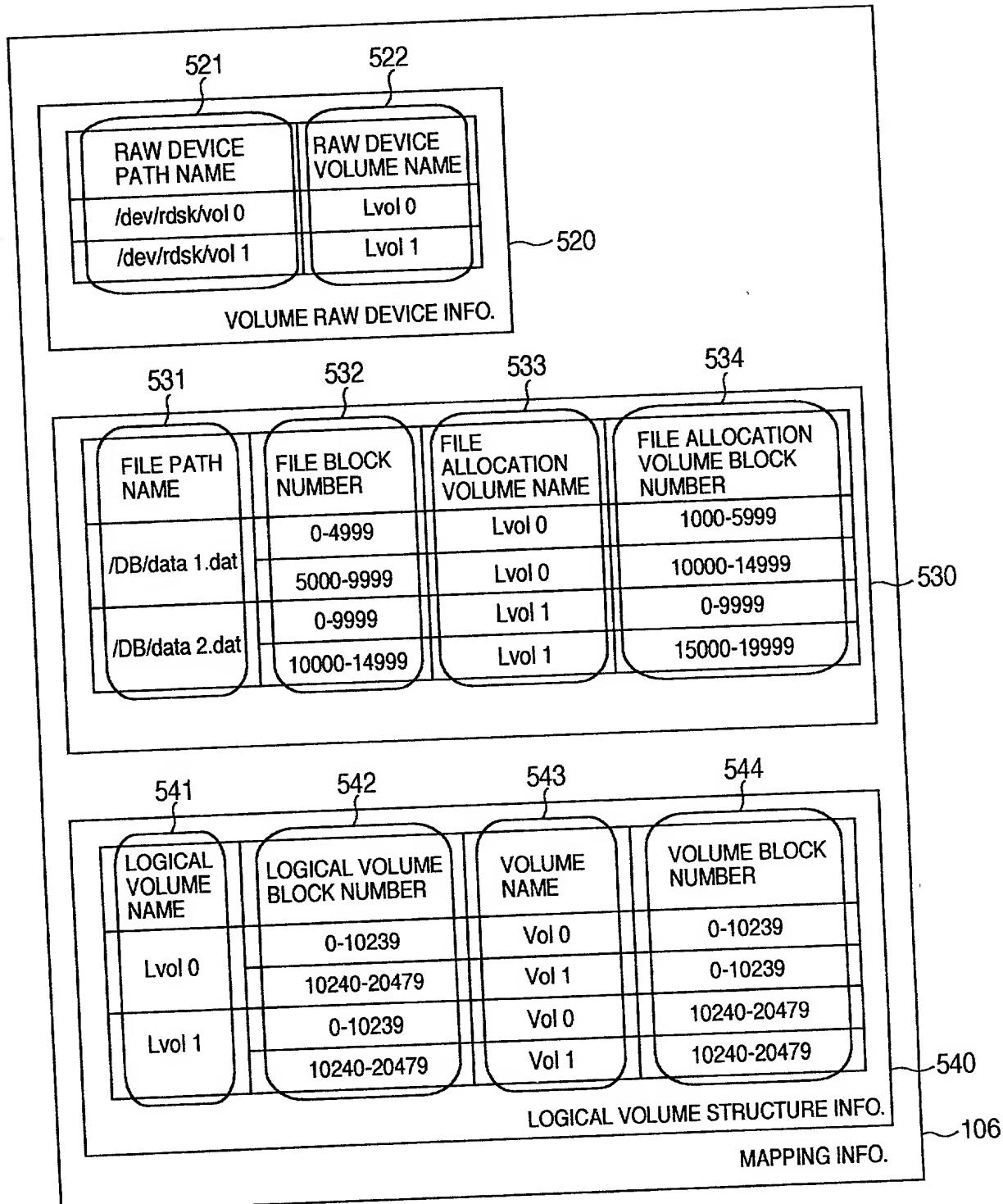


FIG.3

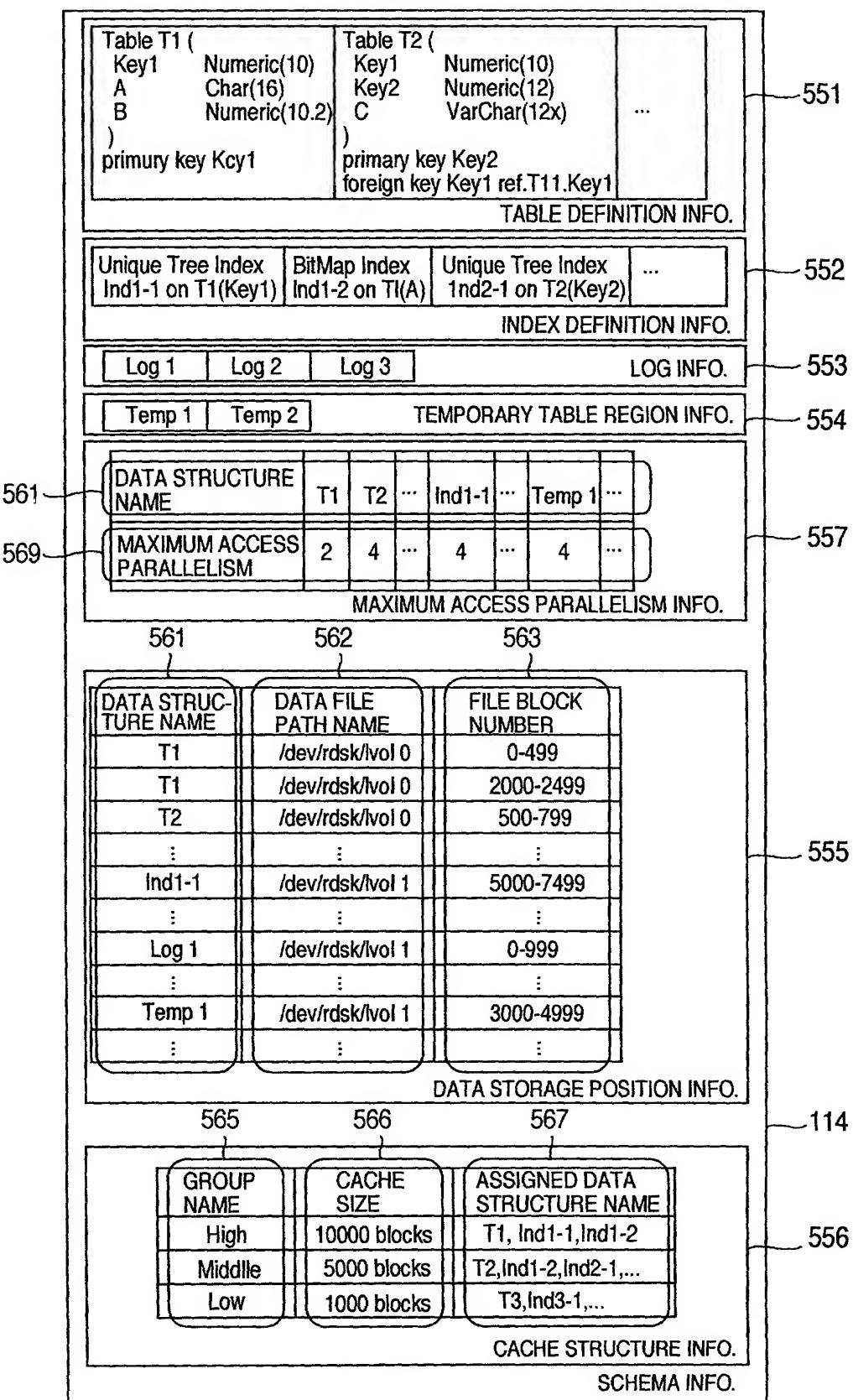


FIG.4

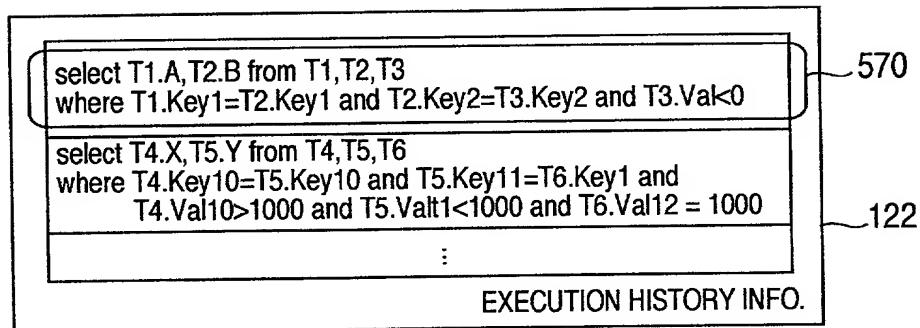


FIG.5

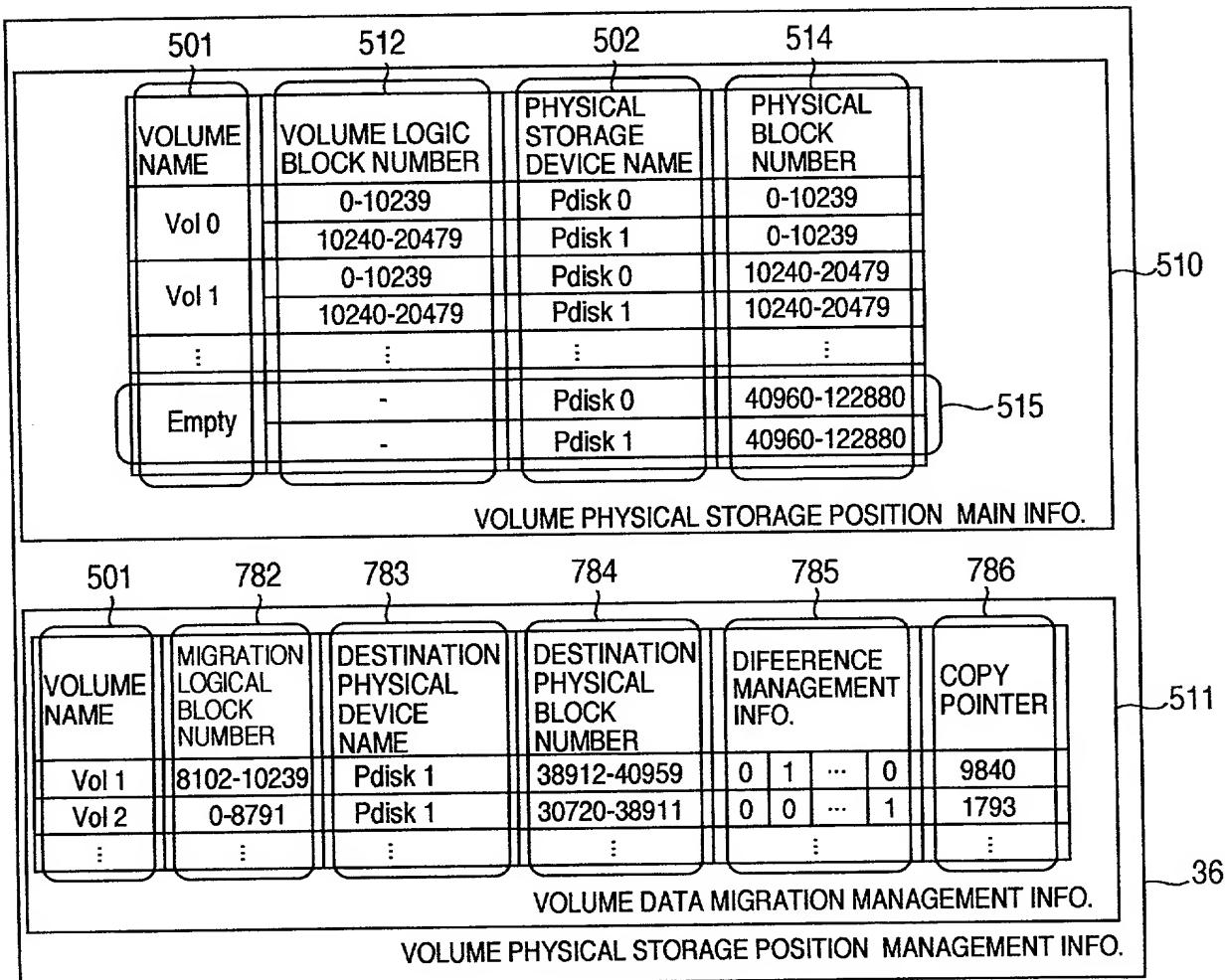


FIG.6

VOLUME NAME	Vol 0	Vol 0	Vol 1	...
PHYSICAL STORAGE DEVICE NAME	Pdisk 0	Pdisk 1	Pdisk 0	...
CUMULATIVE OPERATION TIME	23917390	38902849	8012891	...
PREVIOUS CUMULATIVE OPERATION TIME	22787638	38783484	7592039	...
OPERATION RATE	2000/4/1 12:00~ 2000/4/1 12:15	20%	12%	4%
	2000/4/1 12:15~ 2000/4/1 12:30	15%	10%	7%
	2000/4/1 12:30~ 2000/4/1 12:45	16%	9%	5%
	:	:	:	:
PREVIOUS CUMULATIVE OPERATION TIME ACQUIRING TIME		PHYSICAL STORAGE DEVICE OPERATION INFO.		

FIG.7

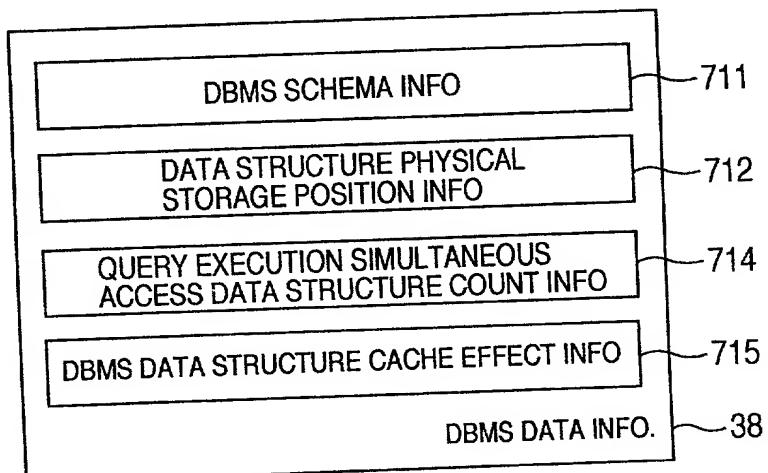


FIG.8

631	DBMS NAME	DBMS 1	DBMS 1	DBMS 1	DBMS 1	DBMS 2	...	621
561	DATA STRUCTURE NAME	TI	Ind1-1	Log 1	Temp 1	Ti	...	
640	DATA STRUCTURE TYPE	TABLE	INDEX	LOG	TEMPORAY TABLE	TABLE	...	
641	DATA AMOUNT OF DATA STRUCTURE	128MB	8MB	32MB	128MB	512MB	...	
569	MAXIMUM ACCESS PARALLELISM	2	4	-	4	2	...	
								DBMS DATA STRUCTURE INFO.
631	DBMS NAME	DATA STORAGE POSITION INFO						622
	DBMS 1	DATA STORAGE POSITION INFO.555 IN DBMS 1						
	DBMS 2	DATA STORAGE POSITION INFO.555 IN DBMS 2						
						DBMS DATA STORAGE POSITION INFO.
631	DBMS NAME	BEFORE PARTITIONED ORIGINAL DATA STRUCTURE NAME		DATA STRUCTURE NAME	PARTITIONING METHOD			623
	DBMS 1	T4		T4.P1	T4.N<50			
		...		T4.P2	T4.N>50			
			
								DEMS PARTITIONED TABLE/INDEX INFO.
631	DBMS NAME	DBMS 1	DBMS 1	DBMS 2	...			624
635	INDEX NAME	Ind1-1	Ind1-2	Ind1-1	...			
636	INDEX TYPE	Tree	BitMap	Tree	...			
637	COORDINATE TABLE INFO	Tl(Key1)	Tl(A)	Tl(ID1)	...			
								DEMS INDEX DEFINITION INFO.
631	DBMS NAME	HOST NAME		DBMS NAME	CACHE STRUCTURE INFO.			625
651	DBMS 1	DB_Host1		DBMS 1	CACHE STRUCTURE INFO .556 IN DBMS 1			
631	DBMS 2	DB_Host2		DBMS 2	CACHE STRUCTURE INFO .556 IN DBMS 2			
			
								DBMS CACHE STRUCTURE INFO.
626								711
								DBMS SCHEMA INFO.

FIG.9

FIG.10

631	701	702	703
DBMS NAME	DATA STRUCTURE NAME A	DATA STRUCTURE NAME B	COUNT
DBMS 1	T1	Ind 1-1	2789
⋮	⋮	⋮	⋮
DBMS 2	Ti	Ind i-1	829
⋮	⋮	⋮	⋮

FIG.11

DBMS NAME	DATA STRUCTURE NAME	CACHE EFFECT INFO	
DBMS 1	T1	THERE IS	
DBMS 1	Ind1-1	THERE IS	
DBMS 1	T2	THERE IS NO	
:	:	:	
DBMS 2	Ti	THERE IS	
:	:	:	

DBMS DATA STRUCTURE CACHE EFFECT INFO.

631 561 733 715

FIG. 12

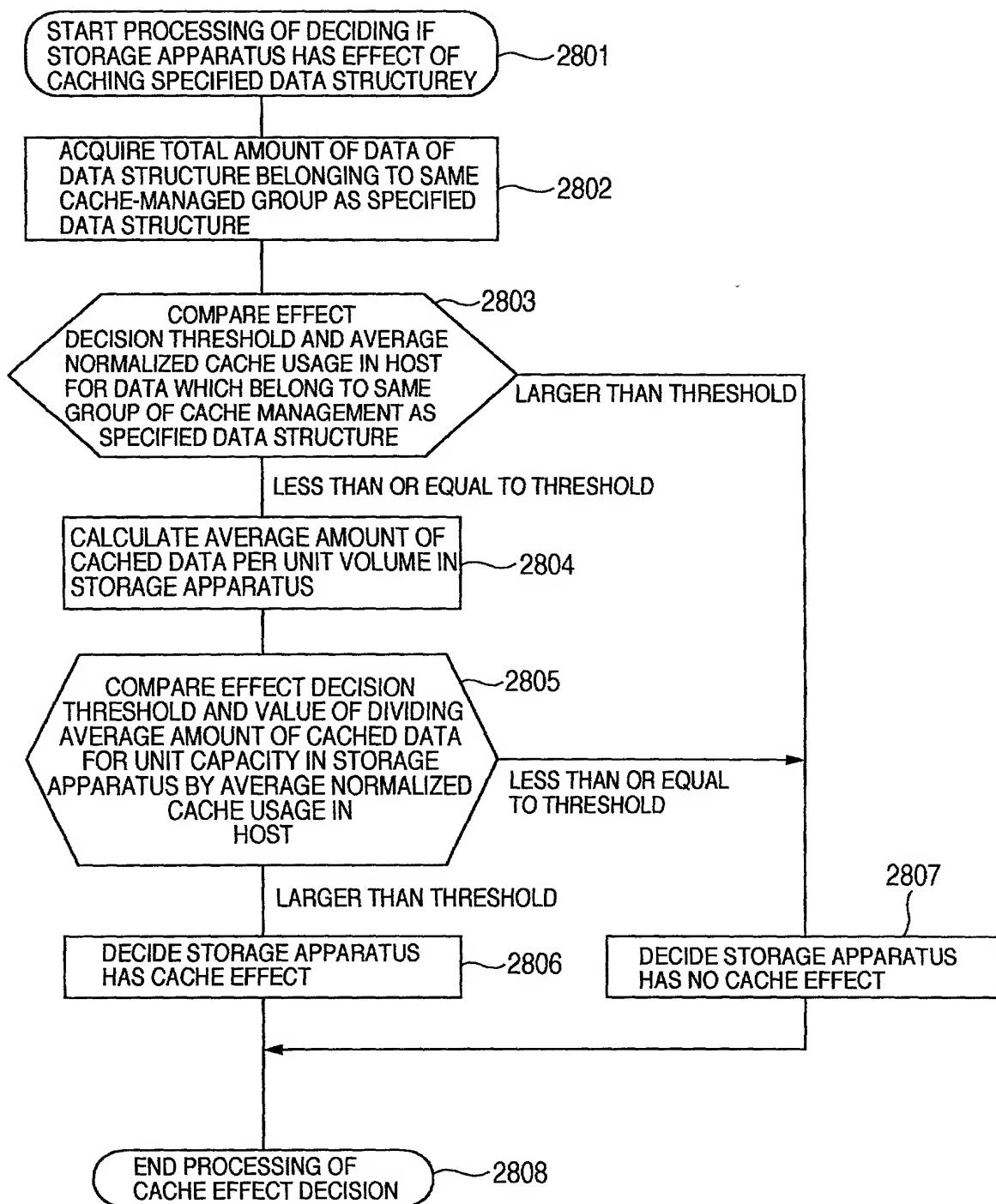


FIG.13

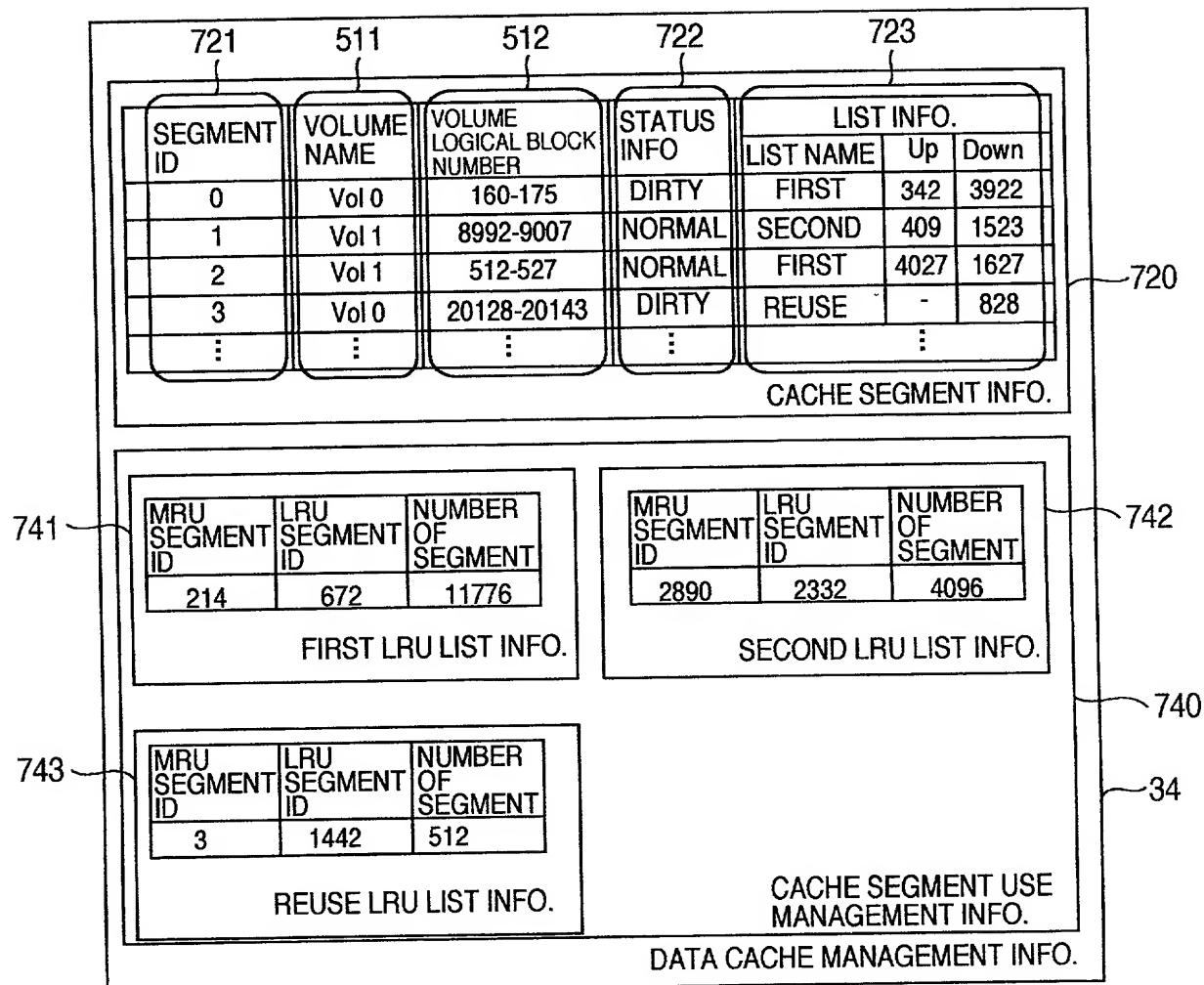


FIG.14

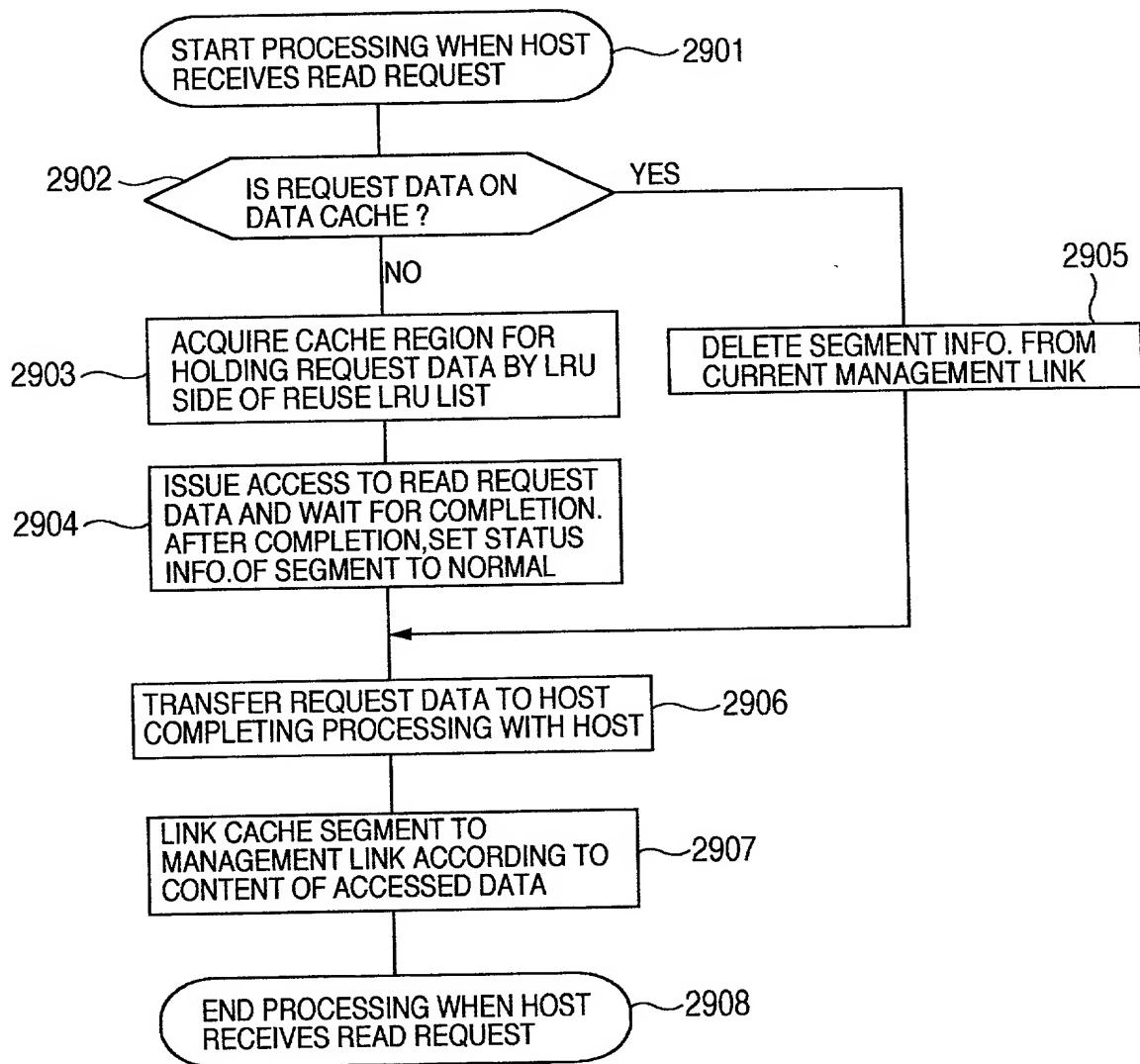


FIG. 15

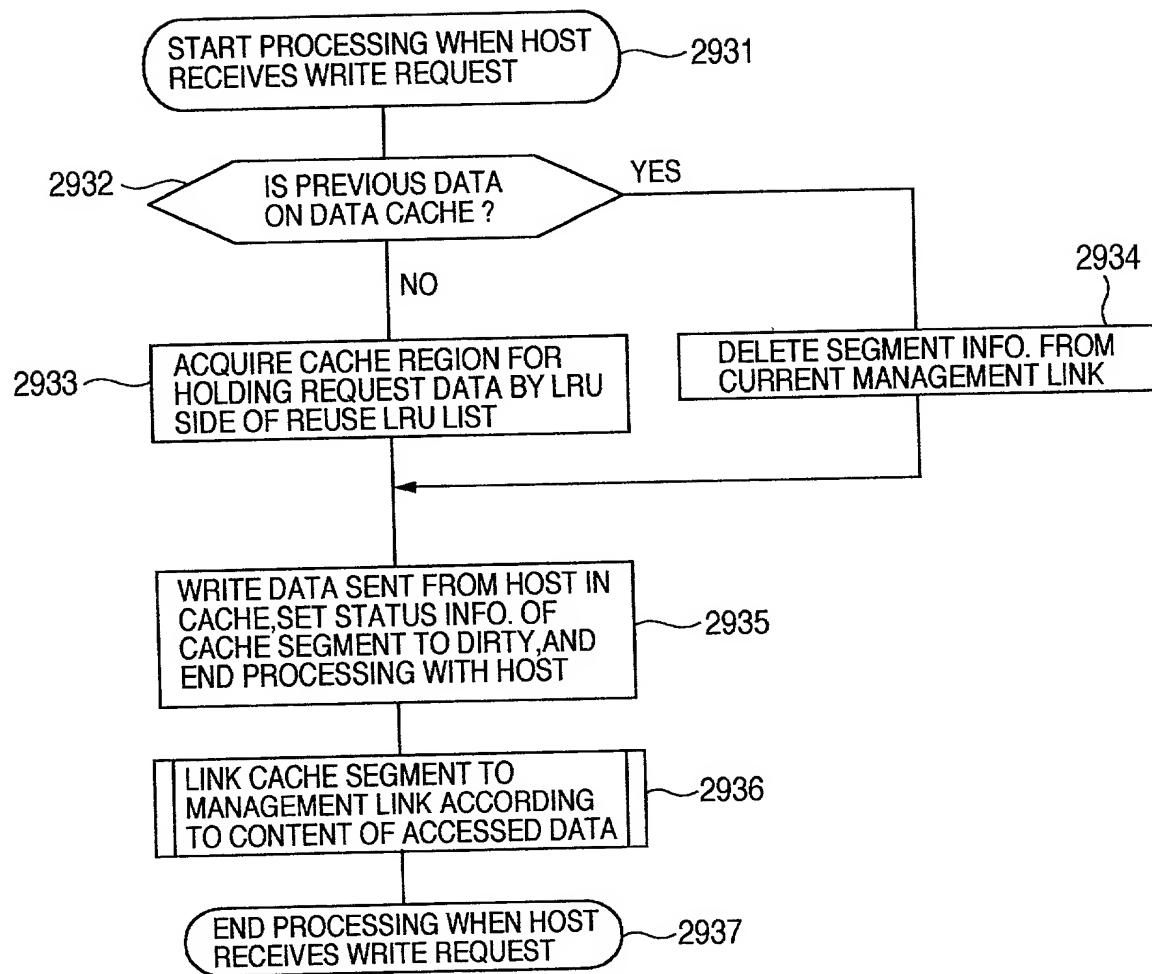


FIG.16

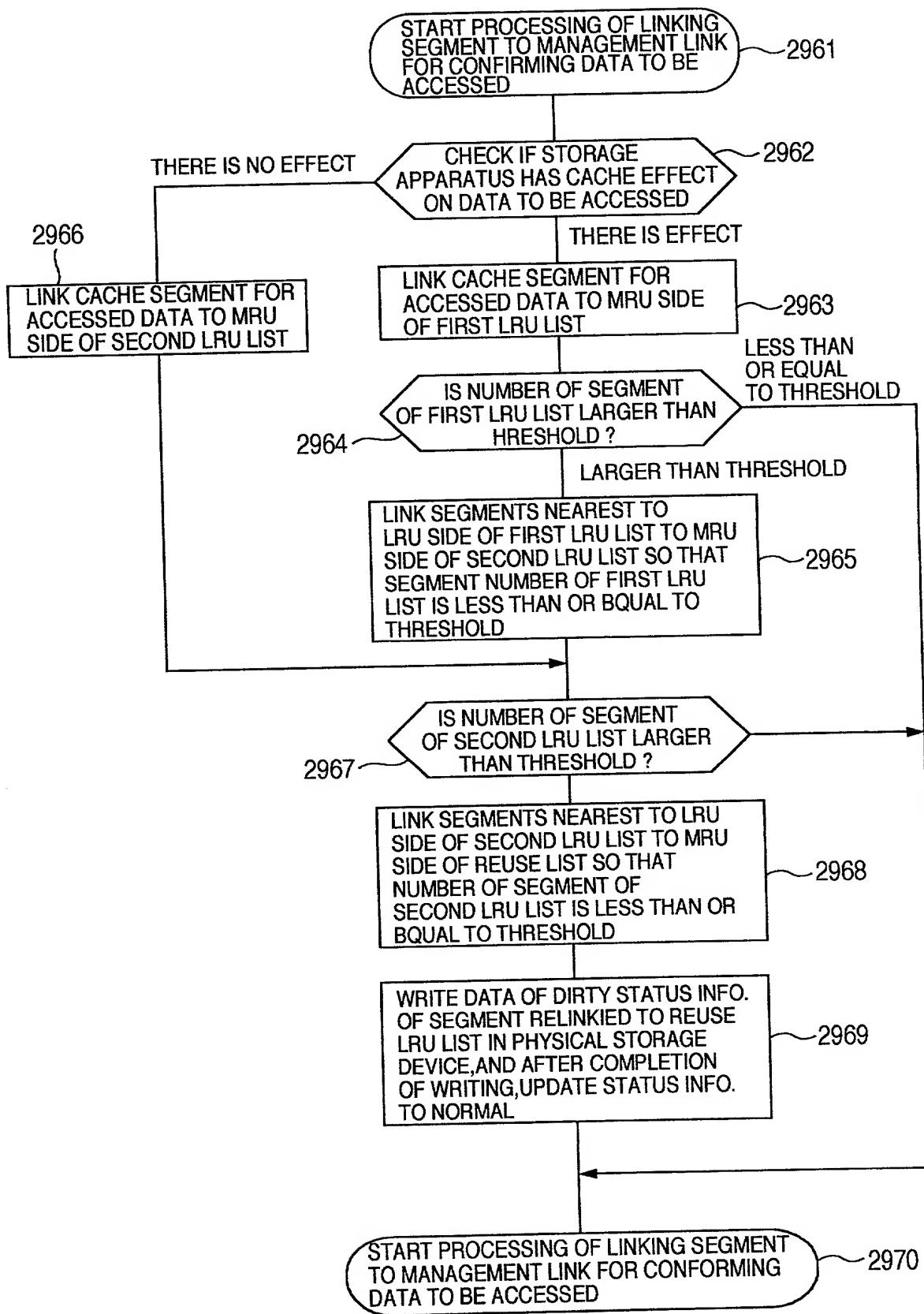


FIG.17

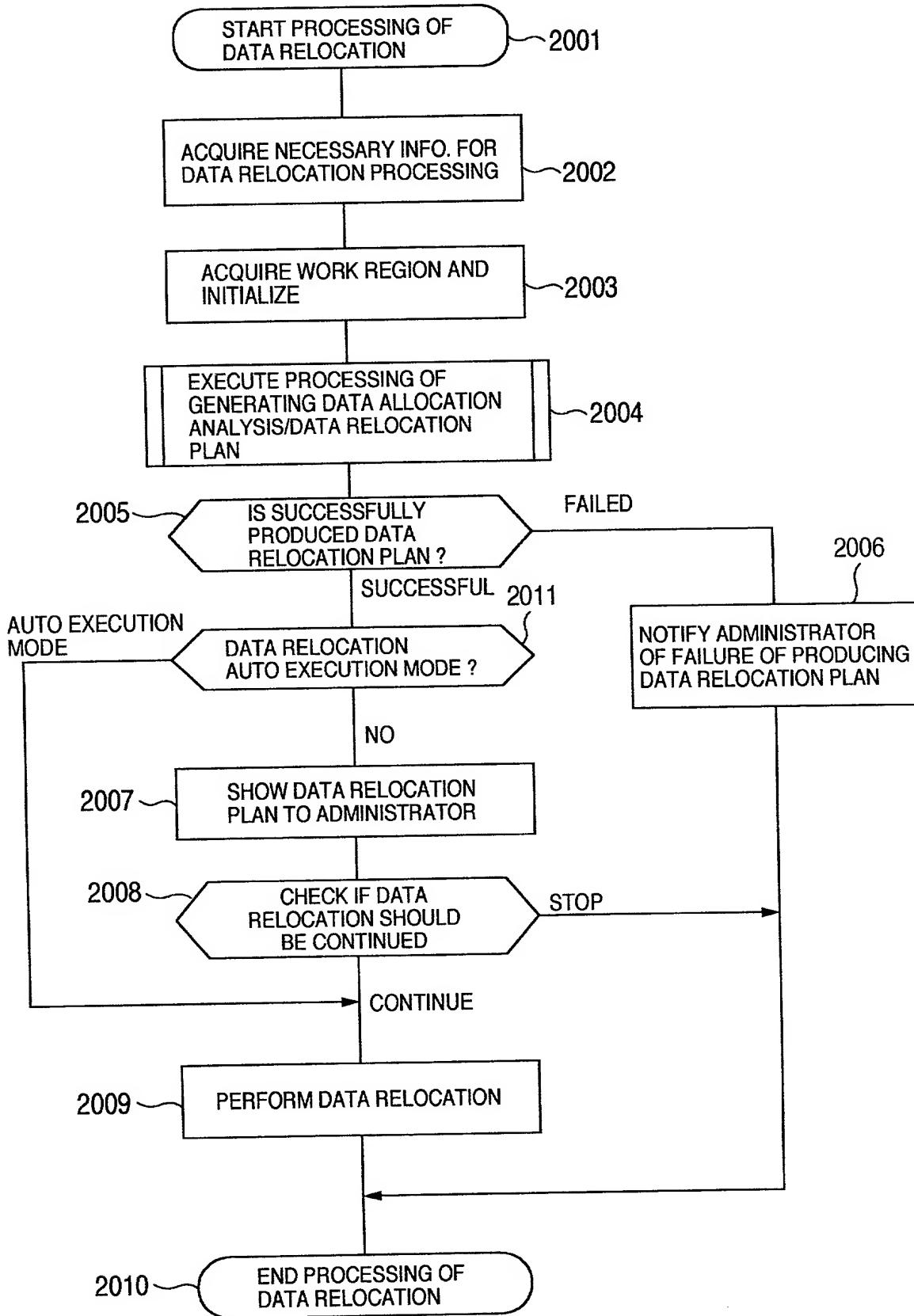


FIG.18

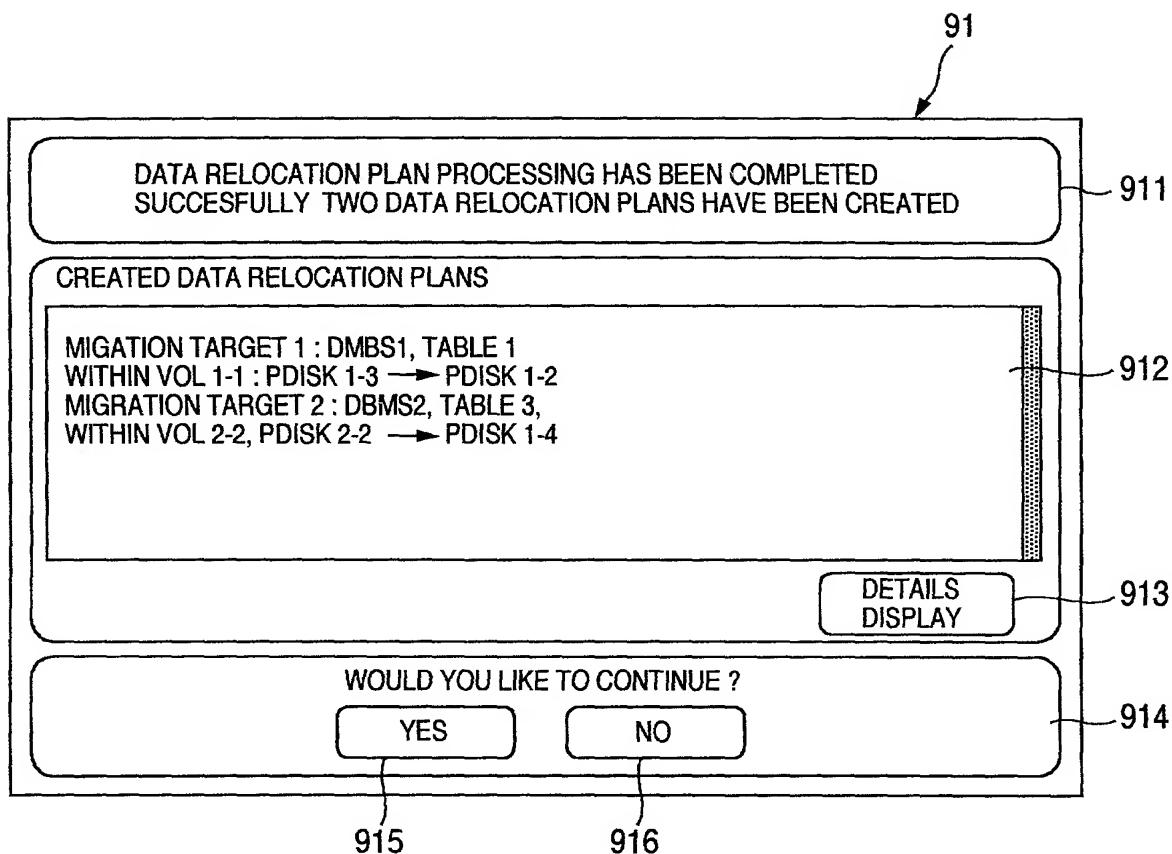


FIG.19

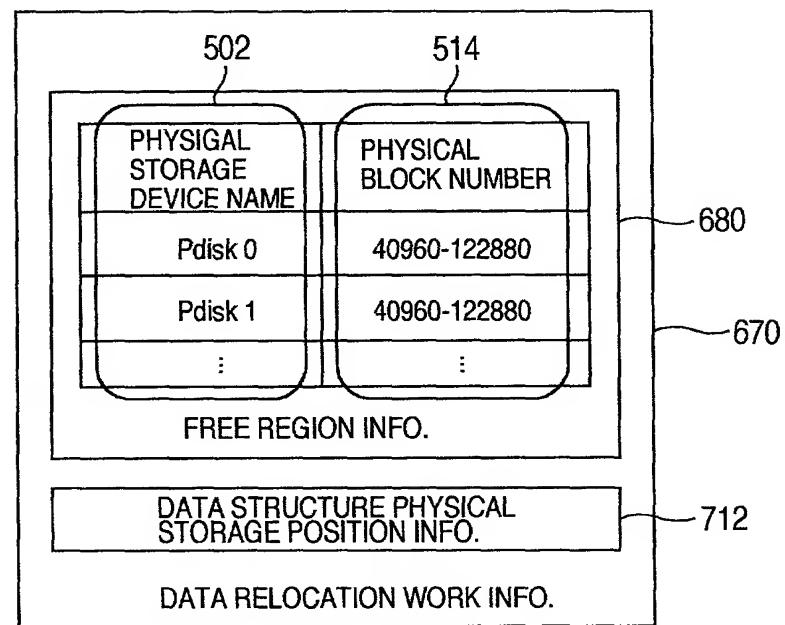


FIG.20

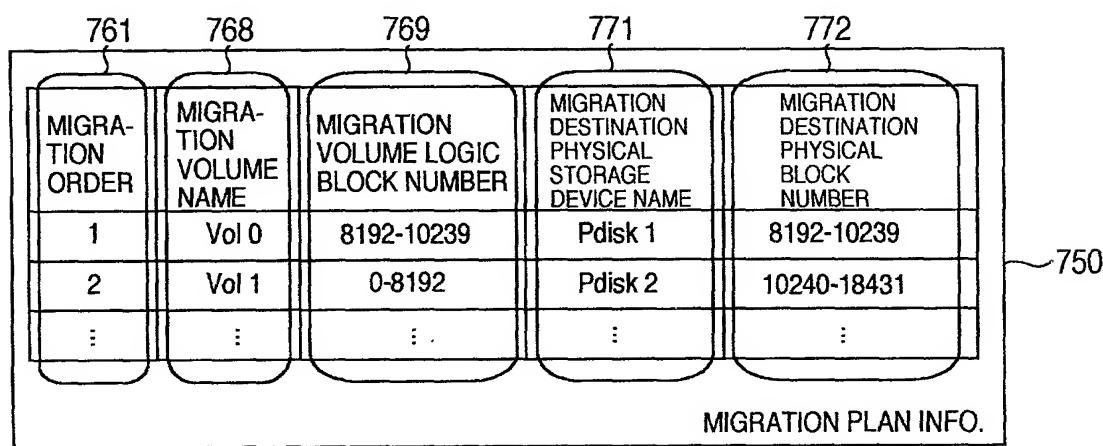


FIG.21

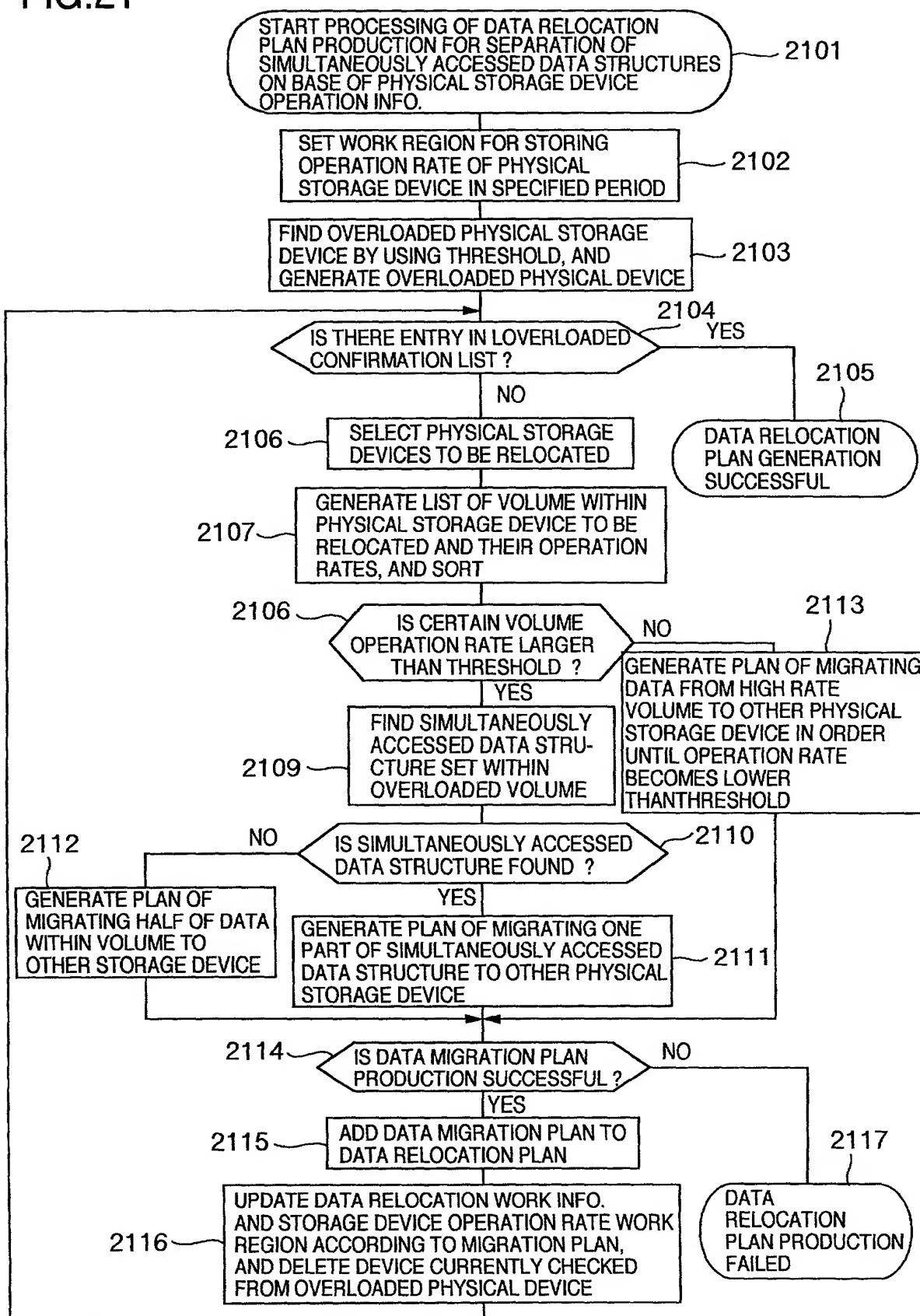


FIG.22

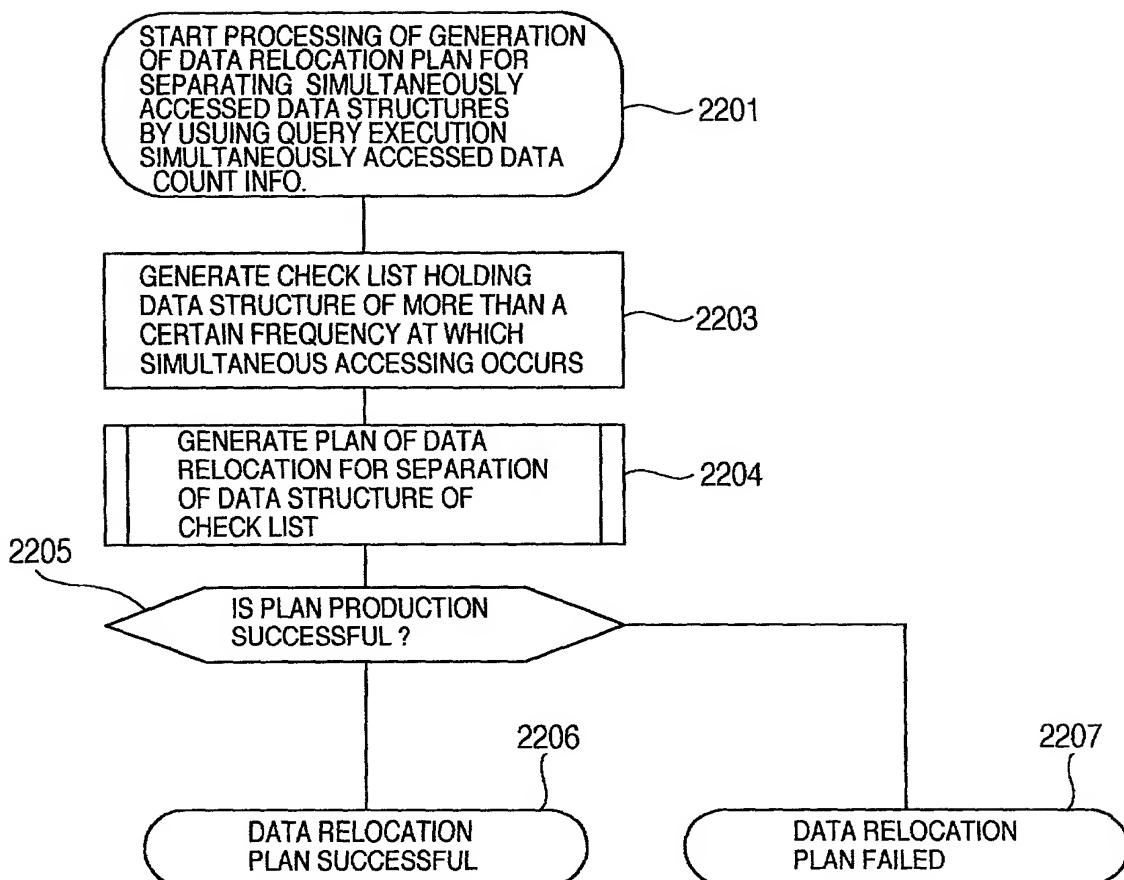


FIG.23

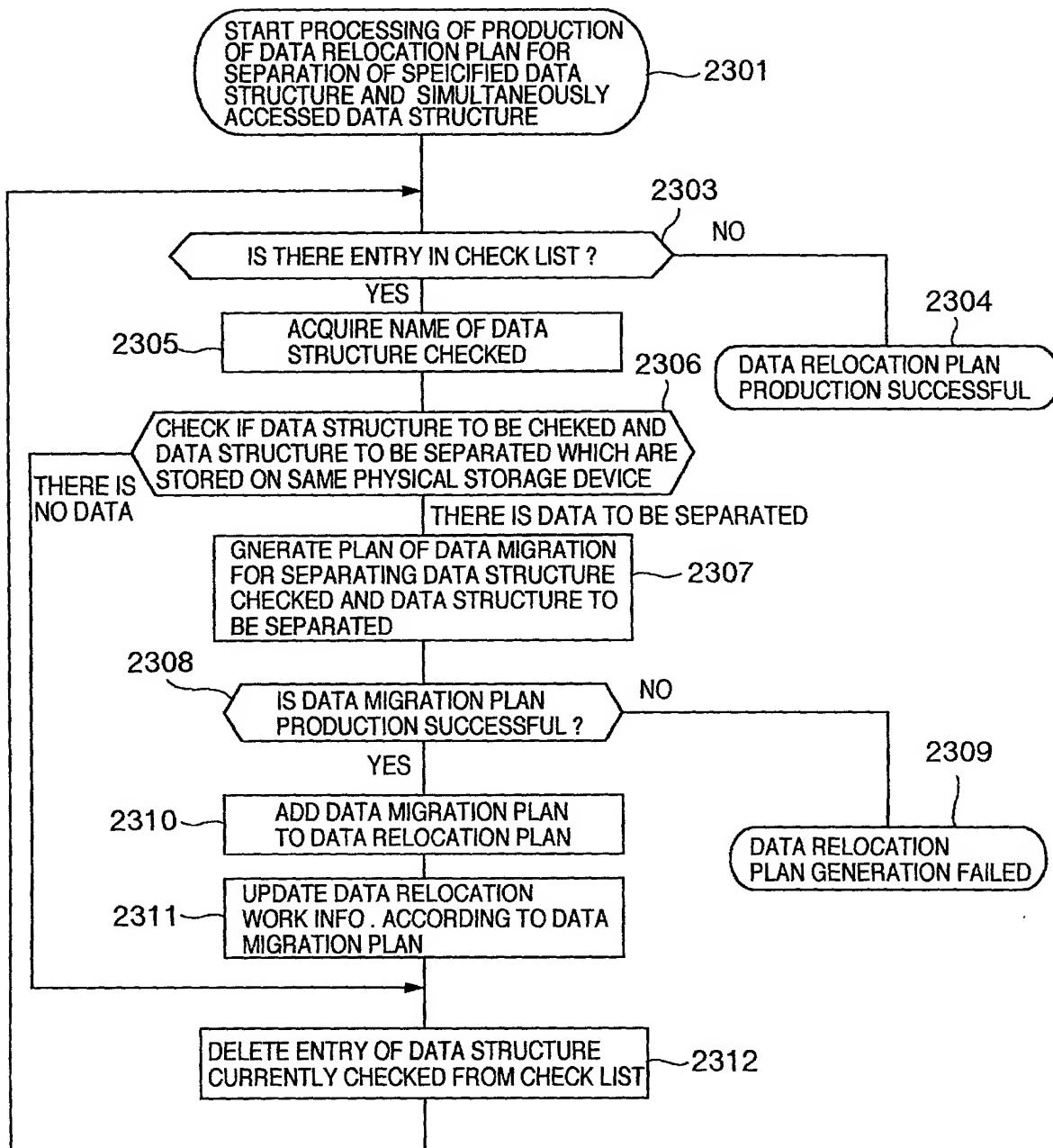


FIG.24

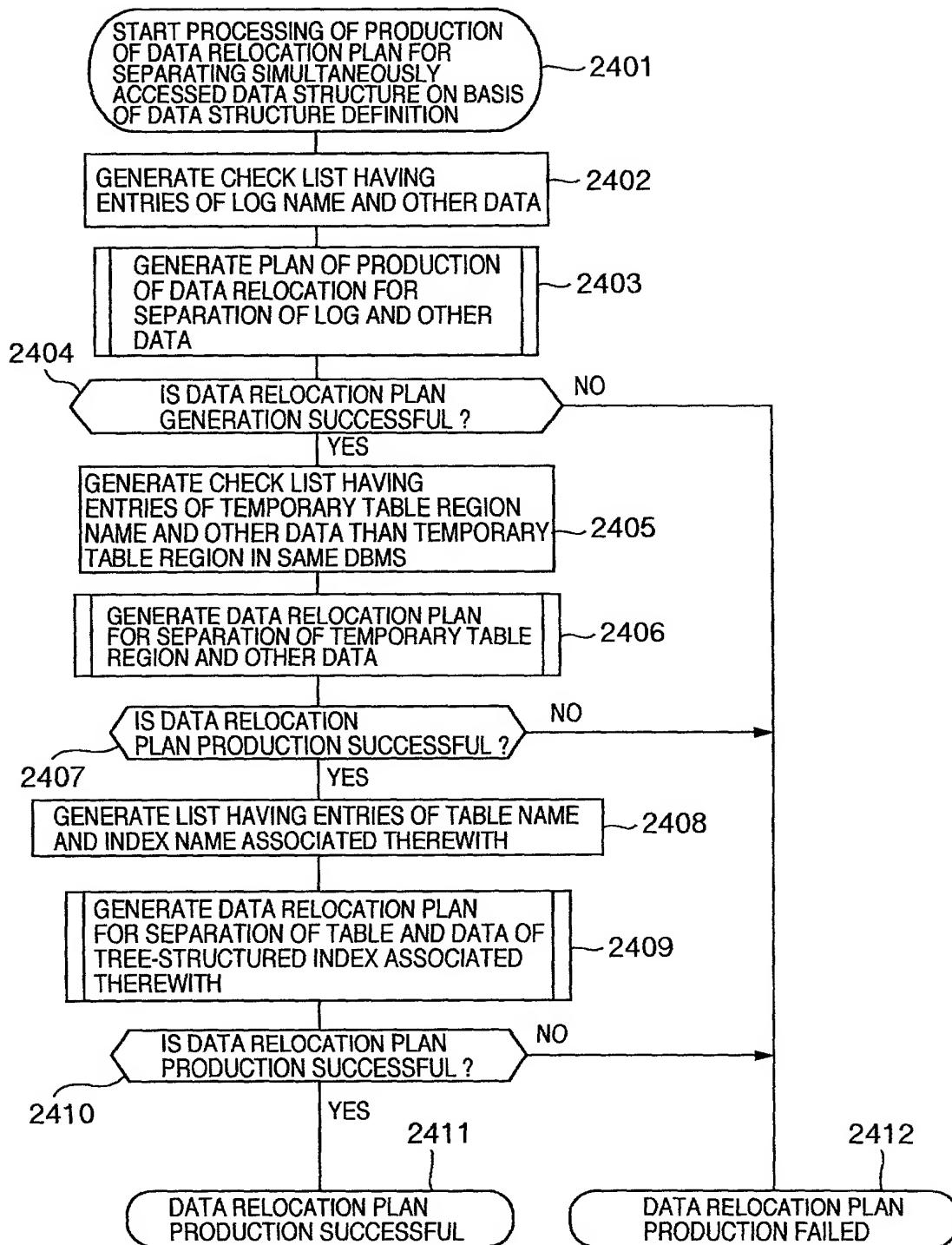


FIG.25

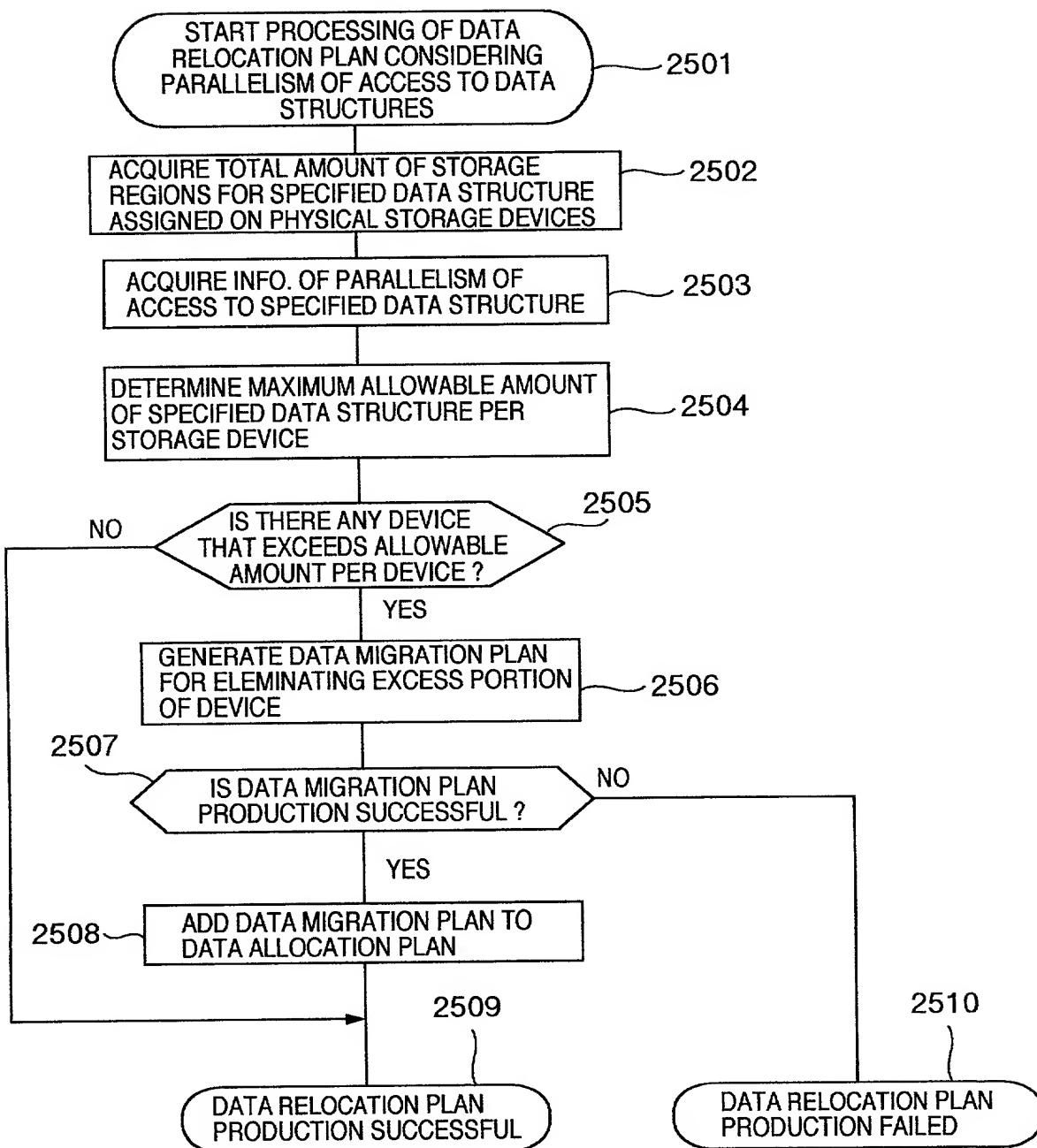


FIG.26

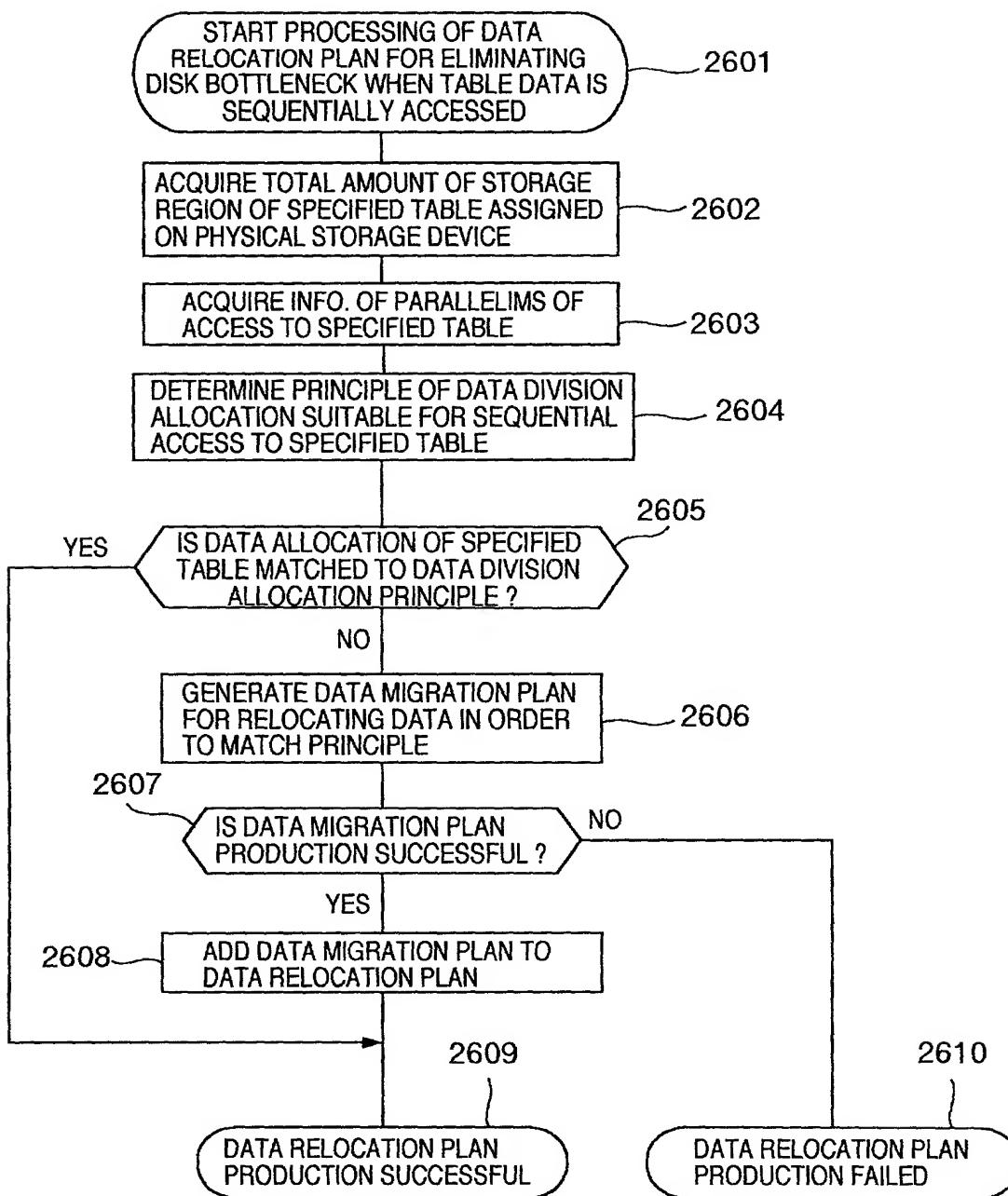


FIG.27

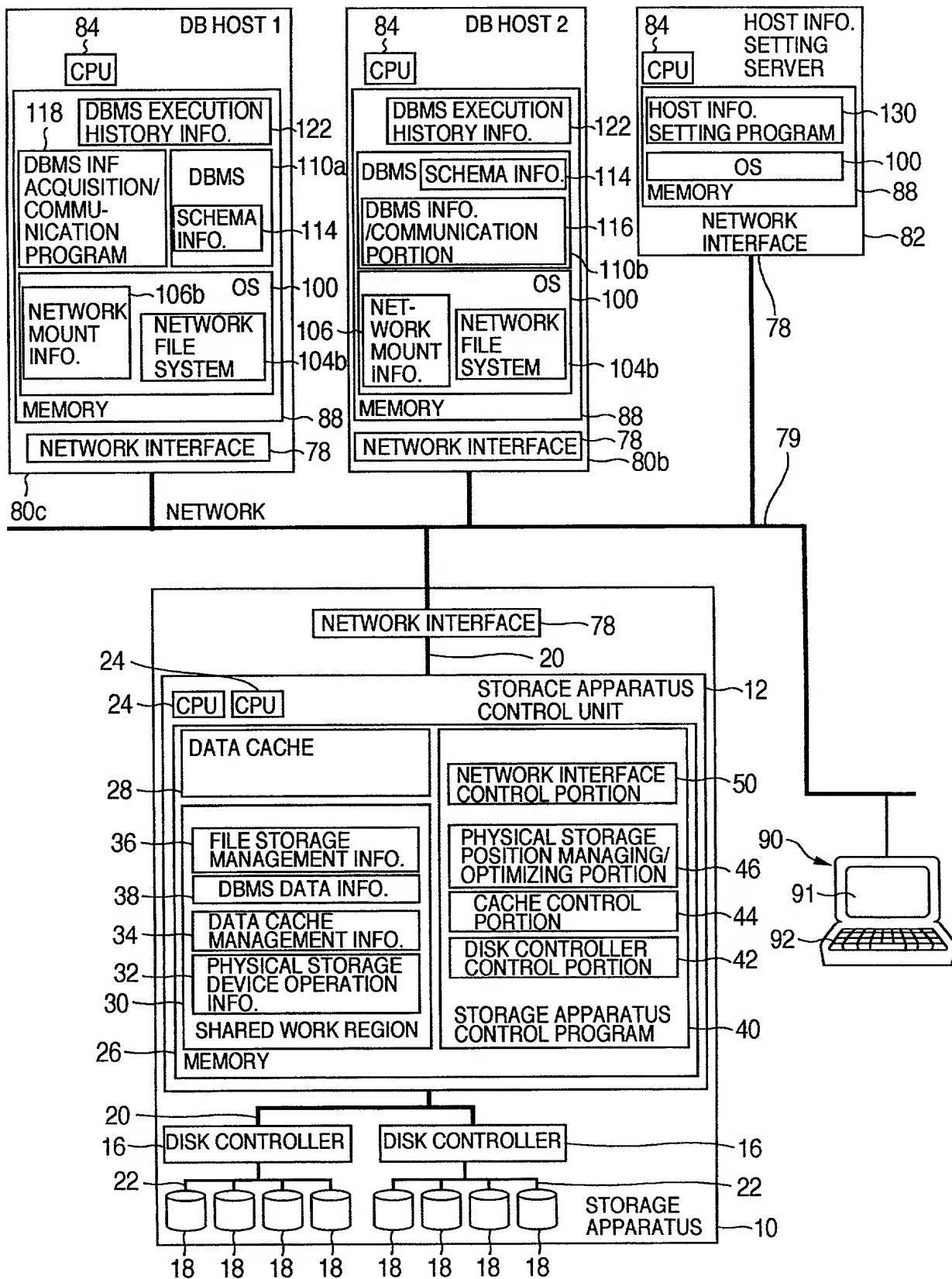


FIG.28

Diagram illustrating the structure of NETWORK MOUNT INFO. It consists of three horizontal rows of data, each enclosed in a rounded rectangle. The first row contains three fields: 'STORAGE DEVICE NAME', 'FILE SYSTEM NAME', and 'MOUNT POINT'. The second row contains three fields: 'NAS 0', 'FS 0', and '/NAS 0/FS 0'. The third row contains three fields: 'NAS 0', 'FS 1', and '/NAS 0/FS 1'. The fourth row contains three fields: 'NAS 0', 'FS 2', and '/NAS 0/FS 2'. The entire structure is labeled 'NETWORK MOUNT INFO.' at the bottom. Pointers 583, 1001, and 1031 point to the first, second, and third rows respectively. Pointer 106b points to the entire structure.

STORAGE DEVICE NAME	FILE SYSTEM NAME	MOUNT POINT
NAS 0	FS 0	/NAS 0/FS 0
NAS 0	FS 1	/NAS 0/FS 1
NAS 0	FS 2	/NAS 0/FS 2

NETWORK MOUNT INFO.

FIG.29

Diagram illustrating the structure of FILE PHYSICAL STORAGE POSITION INFO and FILE DATA MIGRATION MANAGEMENT INFO.

FILE PHYSICAL STORAGE POSITION INFO:

1001	1002	1003	502	514
FILE SYSTEM NAME	FILE PATH NAME	FILE BLOCK NUMBER	DEVICE NAME	PHYSICAL BLOCK NUMBER
FS 0	/control.dat	0-1023	Pdisk 0	4096-5119
	/wk/wk 1.dat	0-2047	Pdisk 1	1024-3071
	/wk/wk 1.dat	2048-4095	Pdisk 0	8192-10239
Empty	-	Pdisk 0	40960-122880	
FS 1	/data1.dat	0-4999	Pdisk 1	10240-15239
:	:	:	:	:

FILE PHYSICAL STORAGE POSITION INFO.

FILE DATA MIGRATION MANAGEMENT INFO.:

1001	1002	1021	783	784	785	786
FILE SYSTEM NAME	FILE PATH NAME	Migration FILE BLOCK NUMBER	DESTINATION DEVICE NAME	DESTINATION PHYSICAL BLOCK NUMBER	DIFFERENCE MANAGEMENT INFO.	COPY POINTER
FS 1	/data 1.dat	8192-10239	Pdisk 1	38912-40959	0 1 0	9840
FS 2	/data A.dat	0-8191	Pdisk 1	30720-38911	0 0 1	1792

FILE DATA MIGRATION MANAGEMENT INFO.

FILE STORAGE MANAGEMENT INFO.

Pointers 510b and 1015 point to the first table. Pointer 511b points to the second table. Pointer 36b points to the entire structure.

FIG.30

Diagram illustrating the structure of FIG.30, which is a table with the following data:

FILE SYSTEM NAME	FS 0	FS 0	FS 1	...	1001	
PHYSICAL STORAGE DEVICE NAME	Pdisk 0	Pdisk 1	Pdisk 0	...	502	
CUMULATIVE OPERATION TIME	23917390	38902849	8012891	...	503	
PREVIOUS CUMULATIVE OPERATION TIME	22787638	38783484	7592039	...	593	
OPERATION RATE	2000/4/1 12:00~ 2000/4/1 12:15	20%	12%	4%	...	594
	2000/4/1 12:15~ 2000/4/1 12:30	15%	10%	7%	...	
	2000/4/1 12:30~ 2000/4/1 12:45	16%	9%	5%	...	
	:	:	:	:	:	

Below the table:

- PREVIOUS CUMULATIVE OPERATION TIME ACQUIRING TIME (595) is connected to the table.
- PHYSICAL STORAGE DEVICE OPERATION INFO. (32b) is connected to the table.

FIG.31

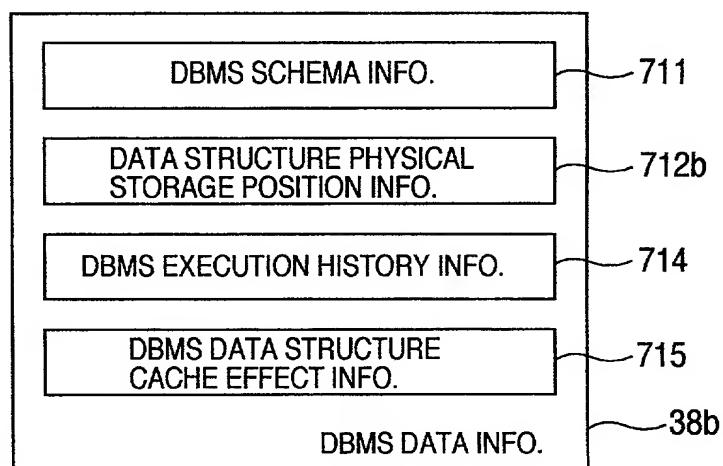


FIG.32

DBMS NAME	DBMS 1	DBMS 1	DBMS 1	...	DBMS 2	...	631
DATA STRUCTURE NAME	T1	T1	T2	...	Ti	...	561
FILE SYSTEM NAME	FS 1	FS 1	FS 1	...	FS 2	...	1001
FILE PATH NAME	/data 1.dat	/data 1.dat	/data 2.dat	...	/data i.dat	...	1002
FILE BLOCK NUMBER	0-4999	5000-9999	0-4999	...	0-9999	...	1003
PHYSICAL STORAGE DEVICE NAME	Pdisk 1	Pdisk 0	Pdisk 1	...	Pdisk 2	...	514
PHYSICAL BLOCK NUMBER	10240-15239	10240-15239	15240-20239	...	20480-30479	...	502
DATA STRUCTURE PHYSICAL STORAGE POSITION INFO.							~712b

FIG.33

721	1001	1002	1003	722	723	
SEGMENT ID	FILE SYSTEM NAME	FILE PATH NAME	FILE BLOCK NUMBER	STATUS INFO.	LIST INFO.	
0	FS 1	/data 1.dat	160-175	DIRTY	LIST NAME	Up
1	FS 2	/data i.dat	8992-9007	NORMAL	SECOND	409 1523
2	FS 1	/data 1.dat	512- 527	NORMAL	FIRST	4027 1627
3	FS 0	/control.dat	0-15	WRITE	REUSE	- 828
:	:	:	:	:	:	:

CACHE SEGMENT INFO.

741	MRU SEGMENT ID	LRU SEGMENT ID	NUMBER OF SEGMENT	742
	214	672	11776	
	FIRST LRU LIST INFO.			
	MRU SEGMENT ID	LRU SEGMENT ID	NUMBER OF SEGMENT	
	2890	2332	4096	
	SECOND LRU LIST INFO.			

743	MRU SEGMENT ID	LRU SEGMENT ID	NUMBER OF SEGMENT	740
	3	1442	512	
	REUSED LRU LIST INFO.			
	MRU SEGMENT ID	LRU SEGMENT ID	NUMBER OF SEGMENT	
	34b			
	CACHE SEGMENT USE MANAGEMENT INFO.			

DATA CACHE MANAGEMENT INFO.

FIG.34

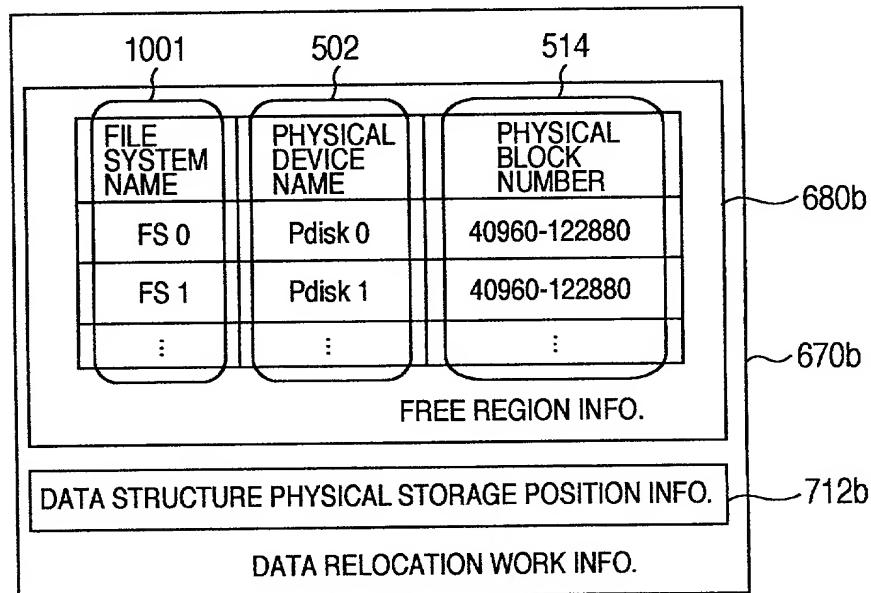


FIG.35

